IVIE Enterprises

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SPS-28
Space Sweeper
(INCLUDES 28G & 28B)

Section II

Parts and Service Manual

SERVICE AND MAINTENANCE

WARNING: Maintenance and repairs must be done

by authorized personnel only. Keep Adjustments according to specifications.

MARNING: To prevent injury always stop the en-

gine or motor before doing any maintenance or repairs to this machine. Separate the connectors between the machine and batteries. Disconnect the

wire from the spark plug.

How To Check the Engine

- 1. Check oil level regularly. Change oil after using first two tanks of gasoline. change oil regularly after each twentyfive (25) operating hours, or more often in extremely dirty conditions.
- 2. Keep the engine clean and remove dirt and oil from coiling fins, screen and flywheel for best engine performance and to prevent damage from overheating.

Do not allow dirt to enter the engine when checking oil or adding fuel.

Wire brush carbon deposits from spark plug electrodes and regap at .030 in.

How to Clean the Engine Air Filter

Clean and re-oil every ten (10) hours - more often under extremely dusty conditions.

- 1. Remove filter element. Separate pre-filter from pleated
- 2. Clean pre-filter only in detergent and warm water.
- 3. Squeeze dry.
- 4. Apply liberal amount of clean engine oil and distribute evenly. Squeeze out excess oil.
- 5. Install element.

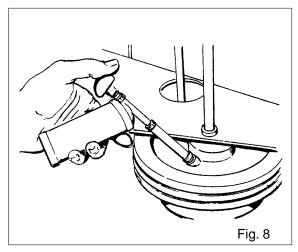
Lubrication

The Model SPS-28 has one grease fitting on the main drive wheel. Apply two strokes of lubricant (PN 883853) from a grease gun each month. (See Fig. 8)



WARNING: To prevent injury and damage, remove the batteries or gasoline before tipping the machine.

To get access to the grease fitting, remove the batteries and hoppers and tip the machine on its side.



Drive Belts

MARNING: To prevent injury always stop the engine or motor before doing any maintenance or repairs to this machine.

The drive belts are automatically tensioned by a springloaded idler wheel. (See Fig. 9)

- 1. Remove the idler pulley tension spring.
- 2. Slip the belt off the pulley.
- 3. Install a new belt.
- 4. Assemble idler tension spring.
- Align pulleys and belts if necessary.

Main Broom Adjustment

The main broom should be periodically readjusted as needed to compensate for wear. Use the broom-adjusting lever to accomplish this. rotate counterclockwise to lower and clockwise to raise. (See Fig. 2, page 6)

Side Broom Belt Adjustment

To increase tension on the side broom belt, loosen the two (2) socket set screws. Push the split clamp forward on the tubular frame until belt is sufficiently tight to drive broom without slipping. Tighten clamp screws.

Friction Drive Wheel

The friction drive wheel should be adjusted so it touches the mating drive wheel. The machine should NOT creep or move when the operator handle is in neutral "UP" position. (See Fig. 10)

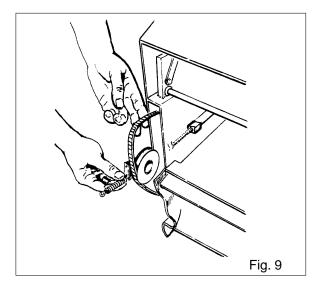
ENGINE SPEED ADJUSTMENT (Model 28G)

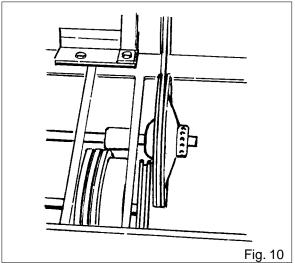
The engine speed (rpm) is governor-controlled and preset at the factory at 2150 rpm (no load). Should it be necessary to check or readjust this setting, use a good strobe tachometer and adjust the governor rod threaded end to maintain 2150 rpm (no load). Be certain all brooms are raised for this adjustment.

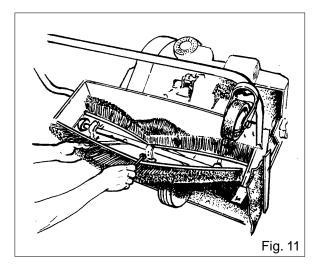
Installation of new Main Brush

The main brush is made up of five (5) bristle strips, installed and retained on the core by three (3) screws and washers for each strip. Do not change (1) new bristle strip with (4) worn strips.

Remove the three screws and washers and the bristle strip retained by them. Install the new strip and assemble the retaining screws and washers. Be sure to install the "V" of each strip in the same relation to the core as its companion strips. (See Fig. 11)







Installation of New Main Brush (cont)

Remove the three screws and washers and the bristle strip retained by them. Install the new strip and assemble the retaining screws and washers. Be sure to install the "V" of each strip in the same relation to the core as its companion strips. (See Fig. 11, page 11)



CAUTION: The strips must be carefully centered on the core before they are firmly locked into position. Rotate the broom by hand through a full revolution to check for possible interference with the shaft carriers at each end. Failure to check this area could result in damage to the drive mechanism.

Continue to replace one strip at a time, checking end clearance on each end, until all strips have been replaced with new fillers.

Readjust the broom to allow for the new bristle strips.

The main brush is preadjusted at the factory to insure even engagement with the floor across its full width. However, should the brush show signs of uneven wear, end to end, compensating adjustments may be made. Raise or lower either end as required by changing the length of the adjusting rod. (See fig. 12)



(Qualified Service Personnel Only)

Service Hints

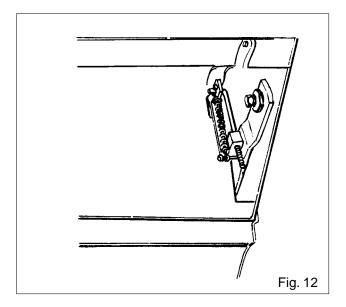
- 1. Check the AC power supply (plug, cords, building fuses and switched, etc.)
- 2. Check for physical damage.
- 3. If there is no DC output, check for blown internal fuse(s); blown fuses may be caused by reversed DC connections or by a defective diode.
- Check parts ammeter, timer-switch, diodes, transformer and fuses for tight connections and for discoloration due to electrical failure.



WARNING: Always wear eye and face shield, and protective clothing when working with batteries to avoid iniurv.

- 5. Check the condition of the batteries.
 - Specific gravity (1.280 is ideal for fully charged batteries.
 - The battery bank voltage should come up to about 30.7 volts at the end of the cycle.
 - The DC charging current should start in the "normal" range and end in the "finish" range.

If the charger is still inoperative after the above checks have been made, call your nearest authorized service center.



Capacitor Test

If a commercial capacitor checker is not available, the following test may be made:

- Briefly short the capacitor terminals together with a screwdriver.
- 2. Disconnect a wire from either capacitor terminal.
- 3. Adjust an ohmmeter to a high value such as RX10K or RX1 Meg.
- 4. Connect the ohmmeter leads to the capacitor terminals.
- A good capacitor will cause the indicator to move quickly to zero ohms, then slowly return to infinite ohms. An open capacitor will not cause any indicator movement; a shorted capacitor will give a continuous zero ohms reading.
- 6. If the test is to be repeated, the capacitor terminals must again be shorted together briefly.

Diode Test

- You must have a #308 ct. Everready continuity tester or equivalent/
- Desolder both wires from the diode lead connections. (Clamp heatsink pliers on the diode leads to avoid damaging the diodes.)
- 3. Attach one of the test unit leads to either diode lead.
- 4. Attach the other test unit lead to the diode heatsink.
- 5. Turn the test unit on and note if the test unit bulb lights.



DANGER:

Reversing charge or polarity of wiring could cause batteries to EXPLODE causing serious bodily harm to yourself or others.

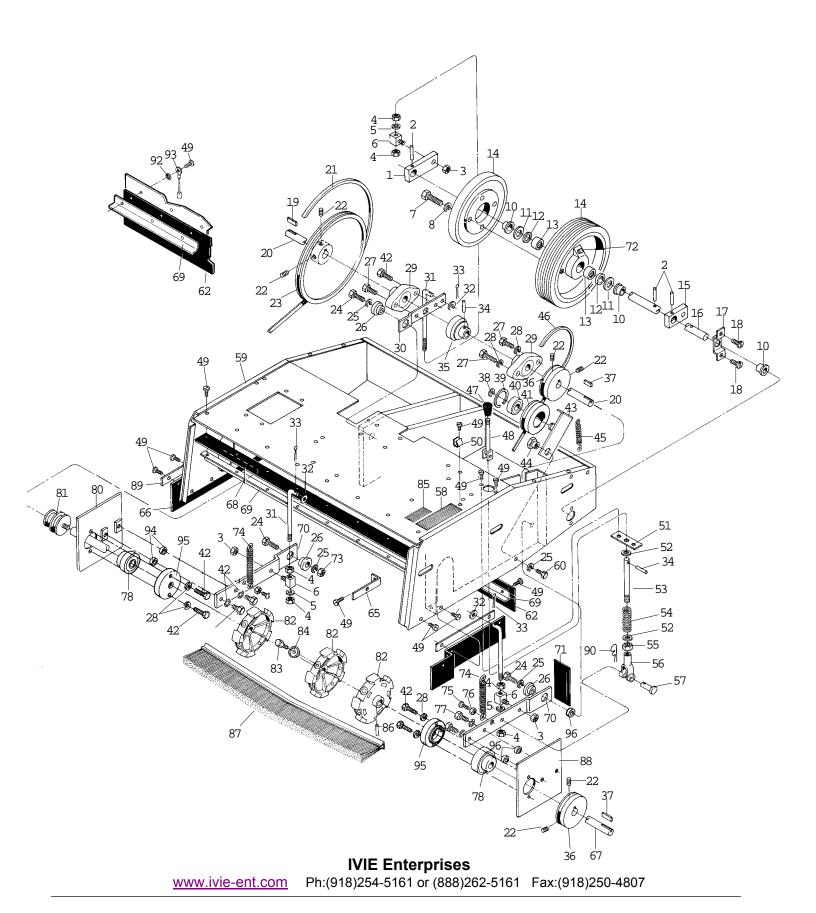
- 6.. Reverse the test unit leads in Steps 3 and 4.
- 7. Turn the test unit on and note if the test unit bulb lights.
- 8. **Good diode** test light bulb should light up in one of Steps 5 and 7 and not in the other.

Defective diode - test bulb will light up in both Steps 5 and 7.

Defective Diode - Test bulb will not light up in either Steps 5 or 7.

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CLARKETECHNOLOGY Model SPS-28 Main Frame, Brush Assembly and Drive System Drawing 1/99

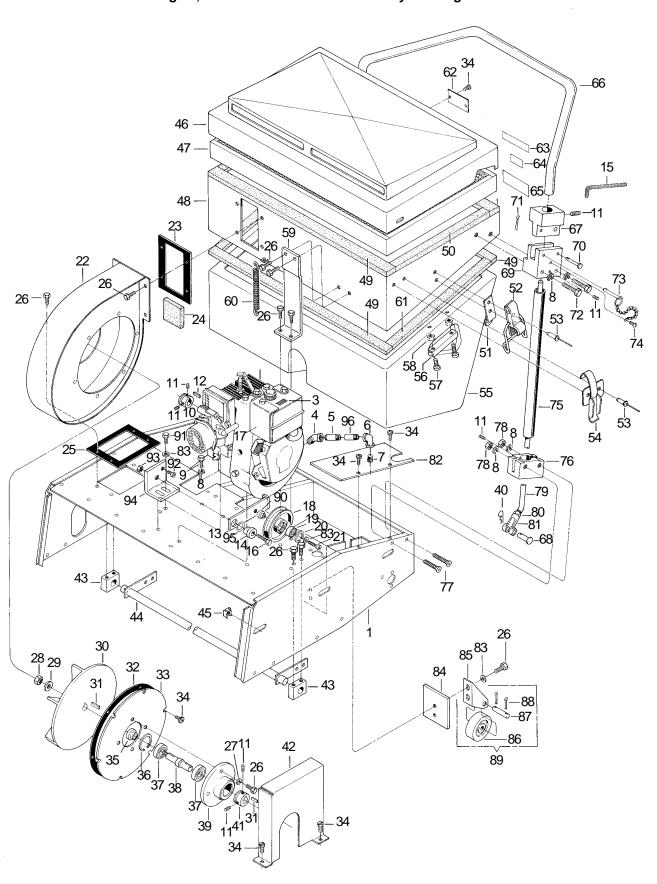


CLARKETECHNOLOGY Model SPS-28 Main Frame, Brush Assembly and Drive System Parts Lists 1/99

| Ref # | Part No. | Description | Qty | Ref # | Part No. | Description | Qty |
|----------|----------|--|--|-------|----------|---|-----|
| 1 | 790322 | Arm, Lower Clutch, R.H. | 1 | 50 | 302101 | Clamp | 1 |
| 2 | 925543 | Pin, 1/8 x 11/4 Roll | 3 | 51 | 796623 | Plate, Brush Lift | 1 |
| 3 | 920349 | Nut, 1/4-20 | 3 | 52 | 791121 | Bushing, Spring | 2 |
| 4 | 920160 | Nut 5/16 - 18 Hx Jam | 6 | 53 | 797423 | Rod, Brush Lift | 1 |
| 5 | 980652 | Washer 5/16 Lock | 3 | 54 | 858302 | Spring | 1 |
| 6 | 791323 | Block, Pedal Pivot | 3 | 55 | 920329 | Nut, 5/16 -24 Hex | 1 |
| 7 | 85813A | Screw 5/16 -18 x 1" Hx | 4 | 56 | 809904 | Yoke | 1 |
| 8 | 980652 | Washer 5/16 Lock | 8 | 57 | 806705 | Pin | 1 |
| 9 | 799728 | Wheel | 1 | 58 | 795121 | Label, Instruction | 1 |
| 10 | 902710 | Bearing, Wheel Shaft | 3 | 59 | 60072A | Frame Assembly, Main | 1 |
| 11 | 980023 | Washer, Thrust | 2 | 60 | 962302 | Screw, ³ / ₈ x 16 x ⁵ / ₈ Hex | 1 |
| 12 | 877661 | Seal, Oil | 2 | 61 | | | |
| 13 | 902682 | Bearing, Wheel | 2 | 62 | 798526 | Skirt, Brush Rear | 1 |
| 14 | 799729 | Wheel | 1 1 | 63 | 798528 | Skirt, Brush L.H. | 1 |
| 15 | 790326 | Arm, Lower clutch, L.H. | 1 1 | 64 | 797225 | Retainer, L.H. Skirt | ; |
| 16 | 797721 | Shaft, Wheel | 1 | 65 | 797224 | Retainer, L.H. Skirt | 1 |
| 17 | 798530 | Support, Wheel Bearing | | 66 | 798527 | Skirt, Brush R.H. | |
| 18 | 962385 | Screw, 10-24 x ½ | 2 | 67 | 797722 | Shaft, Brush | |
| 19 | 915044 | Key, ³ / ₁₆ x ³ / ₁₆ x 1 | 1 | | | , | |
| 20 | 797727 | Shaft, Brush Drive | | 68 | 798525 | Skirt, Hopper Top | 1 |
| | 903540 | Belt, Drive | 1 | 69 | 797221 | Retainer | 2 |
| 21 | | | | 70 | 790337 | Arm, Brush | 2 |
| 22 | 962103 | Screw, 5/16 - 18 x 3/8 | 6 | 71 | 797620 | Seal, Brush Arm | 2 |
| 23 | 796920 | Pulley, Driven | 1 | 72 | 883351 | Grease Fitting | 1 |
| 24 | 962686 | Screw, 5/16-18 x 11/2 Hx | 2 | 73 | 920260 | Nut, 3/8 -16 x 5/16 Hex | 2 |
| 25 | 980638 | Washer, 3/8 "Lock | 4 | 74 | 53038A | Spring | 2 |
| 26 | 808256 | Spacer, Parallel Arm Rear | 3 | 75 | 962139 | Screw, 1/4-20 x 5/8 Hex | 2 |
| 27 | 962219 | Screw, 1/4-20 x 7/8 Hex | 2 | 76 | 920208 | Nut, 1/4-20 | 2 |
| 28 | 980657 | Washer, ¼ Lock | 2 | 77 | 962709 | Screw, 1/4-20 x 1/2 Hex | 4 |
| 29 | 902713 | Bearing | 2 | 78 | 902746 | Bearing, Brush Shaft | 2 |
| 30 | 790324 | Arm, Clutch | 1 | 79 | | | |
| 31 | 797422 | Rod, Brush Lift | 3 | 80 | 797829 | Shield Assembly, Broom Dust | 1 |
| 32 | 980651 | Washer, 5/16 Plain | 3 | 81 | 796922 | Pulley, Side Broom Drive | 1 |
| 33 | 925036 | Pin, ³ / ₃₂ x ³ / ₄ Cotter | 3 | 82 | 792703 | Driver, Brush | 3 |
| 34 | 925550 | Pin, ¹ / ₈ x x 1" Roll | 1 | 83 | 962893 | Screw 1/4-20 x 7/8 Hex | 15 |
| 35 | 799727 | Wheel, Friction Drive | 1 | 84 | 797205 | Retainer | 15 |
| 36 | 796921 | Pulley, Brush Drive | 2 | 85 | 920364 | Nut, 1/4-20 speed | 15 |
| 37 | 915076 | Key, ³ / ₁₆ x ³ / ₁₆ x ⁹ / ₁₆ Ling Sq. | 2 | 86 | 925070 | Pin, ¼ x 1½ Roll | 3 |
| 38 | 167308 | Retaining Ring | 1 | 87 | 790923 | Brush Segment Carpet | 10 |
| 39 | 857301 | Retaining Ring | 1 | | 790920 | Brush Segment 28" | 5 |
| 40 | 902659 | Bearing | 1 | 88 | 797828 | Shield Assembly, Broom Dust L.H. | 1 |
| 41 | 796926 | Pulley, Brush Drive Idler | 1 1 | 89 | 797223 | Retainer, R.H. Skirt | 1 |
| 42 | 962455 | Screw, 1/4-20 x 1" Hex | 6 | 90 | 856702 | Pin, Hair, cotter | 1 |
| 43 | 790320 | Arm Assembly, Idler Pulley | 1 | 91 | 797235 | Retainer, Brush Strp. (Std Mach. Only) | 15 |
| 44 | 798220 | Spacer, clutch Arm | 1 | 92 | 980675 | Washer, #10 Shakeproof | 1 |
| 45 | 858345 | Spring, Bracket Adjusting Screw | 1 1 | 93 | 798541 | Strap, Static Discharge | 1 |
| 46 | 903539 | Belt, Brush Drive | | 94 | 798232 | Spacer | 2 |
| 47 | 815051 | Knob, Handle | | 95 | 797236 | Retainer | 2 |
| 48 | 793923 | Handle Assembly, Brush Lift | | 96 | 858207 | Spacer | 2 |
| 46 49 | 962546 | Screw, 10 x ½ Rd. Hd. Type 23 | 26 | 90 | 000207 | Spacel | |

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CLARKETECHNOLOGY Model SPS-28 Engine, Dust Control & Handle Assembly Drawing 4/99



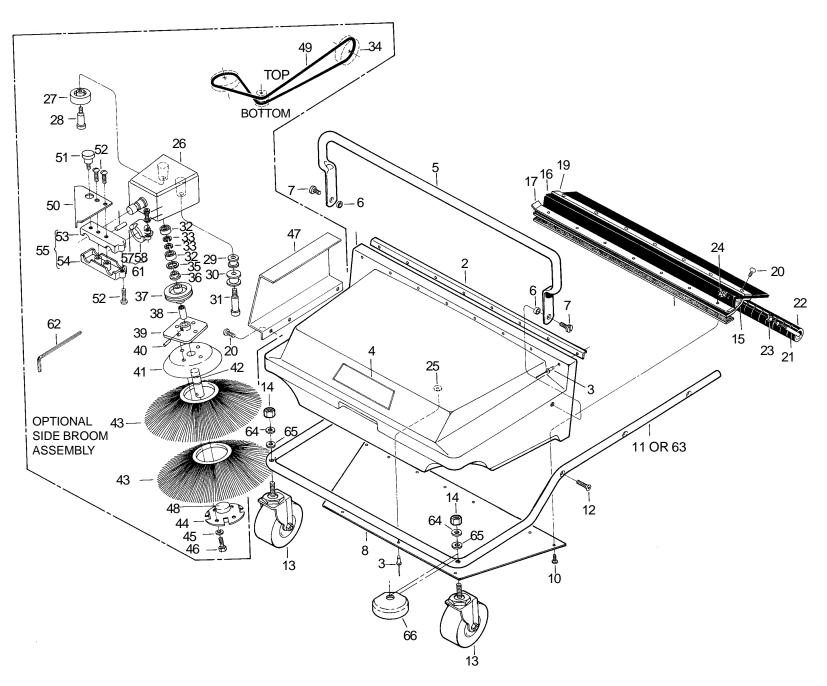
CLARKETECHNOLOGY Model SPS-28 Engine, Dust Control & Handle Assembly 4/99

| Ref # | Part No. | Description | Qty | Ref # | Part No. | Description | Qty |
|------------|----------|--|-----|-------|----------|--|-----|
| 1 | 60072A | Frame, Main | 1 | 51 | 793820 | Guide, Dust Hopper | 2 |
| 2 u | 792920 | Engine, 5 H.P. Briggs and Stratton | 1 | 52 | 682006 | Clamp Assembly, Lid | 2 |
| 3 | 285161 | Label, Gasoline | 1 | 53 | 930086 | Rivet, 3/16 x .450 Long | 10 |
| 4 | 722824 | Elbow, ¼ x 45° Street Brass | 1 | 54 | 285102 | Latch, Inspection Door | 3 |
| 5 | 755721 | Nipple, ¼ x 2½" Brass | 1 | 55 | 60070A | Hopper, Dust | 1 |
| 6 | 822806 | Elbow, ¼ x 90° Brass | 1 | 56 | 797226 | Retainer, Dust Hopper | 2 |
| 7 | | Drain Plug - Part of Engine | | 57 | 962385 | Screw 10- 24 x ½ Bdg. Hd. | 4 |
| 8 | 822806 | Washer 5/16 Lock | 8 | 58 | 920200 | Nut, 10 - 24 Hex | 4 |
| 9 | 196157 | Screw, 5/16 -18 x 11/4 Hex | 4 | 59 | 790832 | Bracket, Dust Housing Support | 1 |
| 10 | 796924 | Pulley, Engine | 1 | 60 | 53038A | Spring | 1 |
| 11 | 962103 | Screw, 5/16 -18 x 3/8 Set | 8 | 61 | 793425 | Gasket, Dust chamber Bottom | 2 |
| 12 | 915044 | Key ³ / ₁₆ x ³ / ₁₆ x 1" Square | 1 | 62 | 700120 | Serial No. Plate - Gasoline (Blank) | 1 |
| 13 | 790335 | Arm, Assembly | 1 | 02 | | Serial No. Plate - Battery (Blank) | 1 |
| 14 | 798231 | Spacer, Parallel Arm Rear | 1 | 63 | 215104 | Label, Warning | i |
| 15 | 987013 | Wrench, Allen 5/32" | 1 | 64 | 755129 | Label, Patent Pending | 1 |
| 16 | 962216 | Screw, 3/8 x 16 x 1" Hex | 1 | 65 | 795120 | Label, Instruction | 1 |
| 17 | 793624 | Guard, Gas Tank | 1 1 | 66 | 793920 | Handle, Upper | 1 |
| 18 | 796925 | Pulley, Idler | | 67 | 790825 | Bracket, Handle Pivot | 2 |
| 19 | 902659 | Bearing | | 68 | 806705 | Pin | 1 |
| 20 | 857301 | Retaining Ring | | 69 | 790824 | Bracket, Handle | 2 |
| 21 | 962454 | Screw, ½-20 x 1" | 1 | 70 | 796721 | Pin, Handle Pivot | 2 |
| 22 | 60073A | Housing Assembly, Blower | | 71 | 925004 | Pin, ¹ / ₁₆ x ½ Cotter | 2 |
| 23 | 793424 | Gasket, Duct to Filter | | | | | |
| 23 24 | 791221 | Bumper, Dust Hopper | | 72 | 85818A | Screw, 5/16 - 18 x 2½ Hex | 4 |
| 25 | 793423 | Gasket, Duct to Frame | | 73 | 796720 | Pin Assembly, Handle Release | 2 |
| | | · · · · · · · · · · · · · · · · · · · | 20 | 74 | 85392A | Screw 6-32 x ³ / ₈ Pan Hd | 2 |
| 26 | 962709 | Screw ½ Sems | - 1 | 75 | 793922 | Handle, Lower | 2 |
| 27 | 980657 | Washer ¼ Lock | 4 | 76 | 798524 | Support, Handle | 2 |
| 28 | 920110 | Nut, 5/16 -18 Elastic Stop | 1 | 77 | 962894 | Screw, 5/16 - 18 x 21/2 | 4 |
| 29 | 980210 | Washer, Impeller | 1 | 78 | 920160 | Nut, ⁵ / ₁₆ - 18 Jam | 4 |
| 30 | 614820 | Impeller | 1 | 79 | 797420 | Rod, Traverse | 1 |
| 31 | 915044 | Key, ³ / ₁₆ x ³ / ₁₆ x 1" Square | 1 | 80 | 920329 | Nut, 5/16 -24 Hex | 1 |
| 32 | 793420 | Gasket, Blower Mounting Adapter | 1 | 81 | 809904 | Yoke | 1 |
| 33 | 790221 | Adapter Assembly, Blower Mounting | | 82 | 62665A | Cover, Frame | 2 |
| 34 | 962835 | Screw, 10 x 24 x ½ Hx St. Typ F | 6 | 83 | 980646 | Washer, ¼ Plain | 7 |
| 35 | 618220 | Spacer, Impeller | 1 | 84 | 796631 | Plate, Stabilizer Whl. Stiffner | 2 |
| 36 | 067304 | Snap Ring | 1 | 85 | 798537 | Support, Rear Wheel | 2 |
| 37 | 902550 | Bearing | 2 | 86 | 419702 | Wheel | 2 |
| 38 | 617704 | Shaft, Impeller | 1 | 87 | 796722 | Pin, Wheel Support | 2 |
| 39 | 794224 | Housing, Bearing | 1 | 88 | 925036 | Pin, ³ / ₃₂ x ³ / ₄ Cotter | 4 |
| 40 | 856702 | Pin, Hair Cotter | 2 | 89 | 799724 | Wheel Assembly, Stabilizer | 2 |
| 41 | 796923 | Pulley, Blower | 1 | 90 | 798230 | Spacer, Idler Pulley | 1 |
| 42 | 793620 | Guard, Belt | 1 | 91 | 962086 | Screw, 1/4-20 x 3/4 Hx Hd. | 2 |
| 43 | 790830 | Bracket, Lift Shaft | 2 | 92 | 962799 | Screw, 1/4-20 x 3/8 Soc. Cap | 1 |
| 44 | 797726 | Shaft Assembly | 1 | 93 | 920148 | Nut, 3/8 -16 Hex Jam | 1 |
| 45 | 920993 | Nut, ³ / ₁₆ -18 Panel | 6 | 94 | 790846 | Bracket, Idler Arm | 1 |
| 46 | 60074A | Cover, Filter | 1 | 95 | 980202 | Washer Wave | 1 |
| 47 | 793320 | Filter, Dust | 1 | 96 | | | |
| | 15724A | Housing Asm., Dust Chamber | 1 1 | 97 | 170266 | Coupling | 1 |
| 48 | | | | | | | |

NOTE: uindicates a change has taken place since last publication of this manual.

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CLARKETECHNOLOGY Model SPS-28 Hopper and Optional Sidebroom Assembly Drawing 1/99



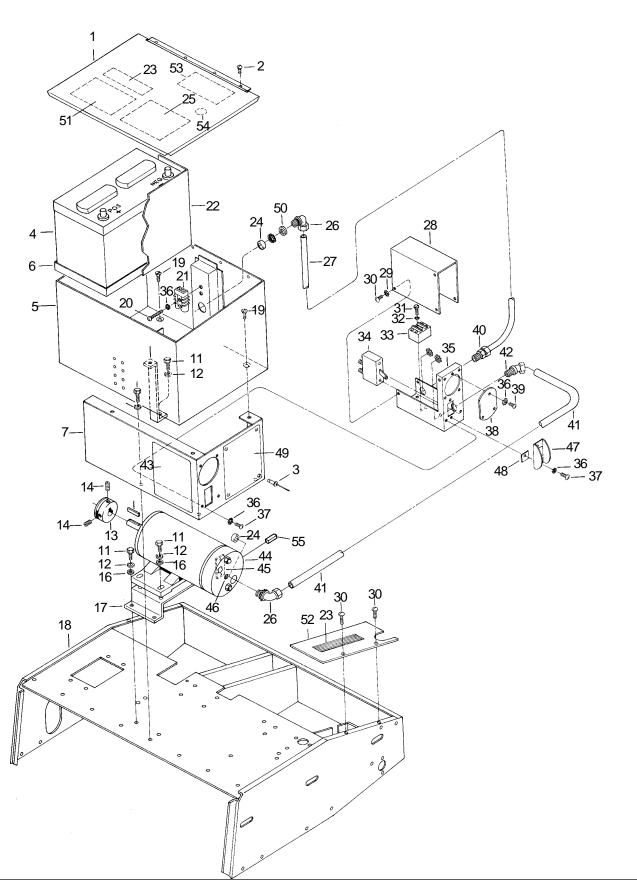
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CLARKETECHNOLOGY Model SPS-28 Hopper and Optional Sidebroom Assembly Parts List 1/99

| Ref # | Part No. | Description | Qty | Ref # | Part No. | Description | Qty |
|-------|----------|--------------------------------|--|-------|-----------------|--------------------------------------|-----|
| 1 | 60075A | Hopper | 1 | 34 | 796922 | Pulley, Side Broom Drive | 1 |
| 2 | 798529 | Support, Hopper Top | 1 | 35 | 857301 | Ring, Retaining | 1 |
| 3 | 930090 | Rivet, 5/32 Dia. | 8 | 36 | 798205 | Spacer | 1 |
| 4 | 725197 | Label, Clarke | 1 | 37 | 796901 | Pulley, Side Brush Drive | 1 |
| 5 | 793921 | Handle, Hopper | 1 | 38 | 792401 | Clutch | 1 |
| 6 | 798203 | Spacer, Carrying Handle | pacer, Carrying Handle 2 39 794320 Hub, Side Brush | | Hub, Side Brush | 1 | |
| 7 | 962568 | Screw, 5/16 -18 x 1/2 Bdg. Hd. | 2 | 40 | 925062 | Roll Pin | 1 |
| 8 | 797820 | Shield, Hopper | 1 | 41 | 794001 | Holder, Side Brush | 1 |
| 9 | 962385 | Screw, 10-24 x 1/2 Bdg. Hd. | 3 | 42 | 797701 | Shaft | 1 |
| 10 | 962677 | Screw, 10-24 x ¾ Pan Hd. | 8 | 43 | 790901 | Brush, Side | 2 |
| 11 | 791220 | Bumper, Front | 1 | 44 | 796420 | Plate, Brush Retaining | 1 |
| 12 | 962803 | Screw 5/16 -18 x 11/2 | 1 | 45 | 980657 | Washer, 1/4 Lock | 5 |
| 13 | 889706 | Wheel, Swivel | 2 | 46 | 962481 | Screw, 1/4-20 x 11/4 Hx Cap | 4 |
| 14 | 920196 | Nut ½-13 ESNA | 2 | 47 | 793621 | Guard, Side Broom Belt | 1 |
| 15 | 790823 | Bracket, Skirt to Hopper | | | 798228 | Spacer | 1 |
| 16 | 798523 | Skirt, Hopper | 1 | 49 | 903538 | Belt, Side Brush Round | 1 |
| 17 | 797220 | Retainer, Lower Skirt | 1 | 50 | 793622 | Guard, side Brush | 1 |
| 18 | 793426 | Gasket, Hopper | 1 | 51 | 725020 | Knob | 1 |
| 19 | 797222 | Retainer, Hopper Skirt | 1 | 52 | 962716 | Screw, 1/4-20 x 11/2 | 2 |
| 20 | 962073 | Screw, 10 - 1/2 Rd. Hd. Type Z | 11 | 53 | 790331 | Arm, Side Brush, Top | 1 |
| 21 | 797421 | Rod, Roller | 1 | 54 | 790331 | Arm, Side Brush, Bottom | 1 |
| 22 | 797501 | Roller | 26 | 55 | 790331 | Arm Assembly, side brush | 1 |
| 23 | 920160 | Nut, 5/16 -18 Hex Jam | 2 | 56 | 925132 | Pin, ¼ x ¾ | 1 |
| 24 | 920110 | Nut, 5/16 -18 Elastic Stop | 2 | 57 | 792023 | Clamp, Top | 1 |
| 25 | 920200 | Nut, 10-24 Hex | | 58 | 792023 | Clamp, Bottom | 1 |
| | | Optional Sidebroom Assembly | | 59 | 962454 | Screw, 1/4-20 x 1" | 2 |
| 26 | 794201 | Housing, side Brush | 1 | 60 | 980657 | Washer, ¼ Lock | 2 |
| 27 | 419702 | Wheel | 1 | 61 | 792023 | Clamp Asm., Side Brush | 1 |
| 28 | 960953 | Screw, Wheel | 1 | 62 | 987516 | Wrench, ³ / ₁₆ | 1 |
| 29 | 796902 | Pulley | 1 | 63 | 61300A | Bumper (Carpet Only) | 1 |
| 30 | 796903 | Pulley 1 | | 64 | 980626 | Washer, ½ Lock | 2 |
| 31 | 960970 | Shoulder Bolt, Pulley | 1 | 65 | 980662 | Washer (Carpet Only) | 2 |
| 32 | 902659 | Bearing | 1 | 66 | 63900A | Guard, Caster (Carpet Only) | 2 |
| 33 | 167308 | Ring, Retaining | 2 | | | | |

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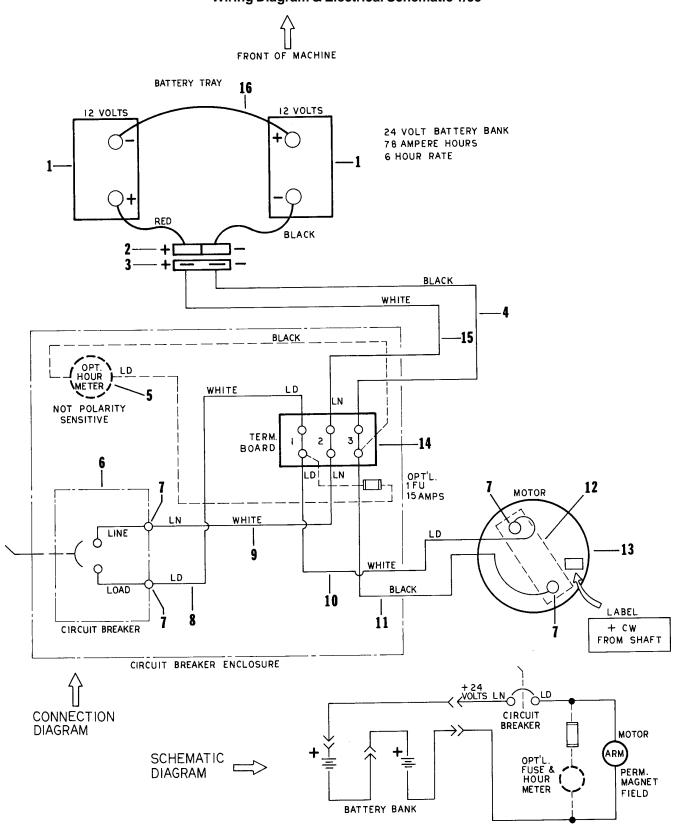
CLARKETECHNOLOGY Model SPS-28 Battery Powered Model Drawing 1/99



CLARKETECHNOLOGY Model SPS-28 Battery Powered Model Drawing 1/99

| Ref # | Part No. | Description | Qty |
|----------|------------------|---|-----|
| 1 | 60071A | Cover Assembly, Battery Access | 1 |
| 2 | 962003 | Screw, 6/32 x 3/8 Rd. Hd. | 4 |
| 3 | 930093 | Rivet, 1/8 x 1/4 - 5/16 Pop | 4 |
| 4 | 871376 | Battery, 95 Amp Hr. (Wet) | 2 |
| | 871377 | Battery, 95 Amp Hr. (Dry) | 2 |
| 5 | 15726A | Housing Assembly, Battery | 1 |
| 6 | 799224 | Tray, Battery | 2 |
| 7 | 15725A | Housing Assembly, Motor | 1 |
| 8 | 962709 | Screw, ¼-20 x ½ Hx St. Sems | 3 |
| 9 | 980657 | Washer, 1/4 Lock | 6 |
| 10 | 790826 | Bracket, Battery Support | 1 |
| 11 | 85811A | Screw, 5/16 -18 x 3/4 Hex Hd. | 8 |
| 12 | 980652 | Washer 5/16 Lock | 12 |
| 13 | 796927 | Pulley, Motor | 1 |
| 14 | 962103 | Screw, 5/16 x 18 x 3/8 | 2 |
| 15 | 915044 | Key, ³ / ₁₆ x ³ / ₁₆ x 1" Long Square | 1 |
| - | | | 4 |
| 16 17 | 980651 790827 | Washer, 5/16 -Plain Bracket Asm., Motor Mounting | 1 |
| | | Main Frame Assembly | 1 - |
| 18 | 60072A | | 1 |
| 19 | 962800 | Screw, ¼-20 x ½ Flat Hd. | 4 |
| 20 | 962212 | Screw 6-32 x ⁷ / ₈ Rd. Hd. | 2 |
| 21 | 911470 | Wire Assembly, Battery Plug | 1 |
| 22 | 797827 | Shield, Battery | 2 |
| 23 | 795136 | Label, Warning | 2 |
| 24 | 791120 | Bushing, Conduit Insulating | 2 |
| 25 | 895196 | Label, Warning | 1 |
| 26 | 792437 | Connector 90° Conduit | 2 |
| 27 | 799024 | Tubing, Battery Enclosure to Circuit Breaker | 1 |
| 28 | 792322 | Cover Assembly, Enclosure | 1 |
| 29 | 980603 | Washer, #1110 Shakeproof | 6 |
| 30 | 962546 | Screw, 10 x 1/2 Rd. Hd. Type 23 | 10 |
| 31 | 962399 | Screw, 8-32 x 11/4 | 2 |
| 32 | 980612 | Washer #8 Lock | 1 |
| 33 | 911438 | Block, Terminal | 1 |
| 34 | 911440 | Switch, Toggle | 1 |
| 35 | 792921 | Enclosure, Circuit Breaker | 1 |
| 36 | 980607 | Washer, #1106 Shakeproof | 5 |
| 37 | 962045 | Screw, 6-32 x 1/4 Rd. Hd. | 2 |
| 38 | 792325 | Cover, enclosure | 1 |
| 39 | 962330 | Screw, 6-32 x 3/8 Rd. Hd. | 3 |
| 40 | 792438 | Connector, Straight Conduit | 1 |
| 41 | 799021 | Tubing, Circuit Breaker to Motor | 1 |
| 42 | 792436 | Connector, 45° Conduit | 1 |
| 43 | 795145 | Label, Wiring Diagram | 1 |
| 44 | 795220 | Motor, Drive 24 Volt DC | 1 |
| 45 | 794720 | Insulation, Paper (Motor) | 1 |
| 46 | 980614 | Washer, #1114 Shakeproof | 2 |
| 47 | 793623 | Guard, Switch | 1 |
| 48 | 792337 | Cover, Switch Guard | i |
| 49 | 796327 | Plate, Safety Label (Eng. Sp.) | 1 |
| 50 | 980303 | Washer | 1 |
| 50 51 | 895178 | Label, Battery Care Instruction | 1 |
| | | | 1 |
| 52 | 62665A | Cover, Frame | 2 |
| 53 | 795151 | Label, Battery Size | 1 |
| 54 | 795143 790926 | Label, UL Decal Brush, Motor | 1 1 |
| 55 | | | |

CLARKETECHNOLOGY Model SPS-28 Wiring Diagram & Electrical Schematic 1/99



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WARNING — All electrical repairs must be done by authorized personnel.

CLARKETECHNOLOGY Model SPS-28 Wiring Diagram 1/99

| Ref # | Part No. | Description | Qty |
|-------|----------|-------------------------------------|-----|
| 1 | 871376 | Battery, 95 amp Hr. (Wet) | 2 |
| | 871377 | Battery, 95 amp Hr. (Dry) | 2 |
| 2 | 41207A | Cable, Battery | 1 |
| 3 | 911470 | Connector | 1 |
| 4 | 951006 | Wire Assembly | 1 |
| 5 | 855607 | Hour Meter (Optional) | 1 |
| 6 | 911440 | Circuit Breaker | 1 |
| 7 | 980614 | Washer, 1/4 External Tooth | 4 |
| 8 | 950807 | Wire Assembly, #10 White | 1 |
| 9 | 950806 | Wire Assembly, #10 White | 1 |
| 10 | 950805 | Wire Assembly, Teminal Board - Mtr. | 1 |
| 11 | 951004 | Wire Assembly, #10 Black | 1 |
| 12 | 794720 | Insulator Motor | 1 |
| 13 | 795220 | Motor, Drive | 1 |
| 14 | 911438 | Block, Terminal | 1 |
| 15 | 950813 | Wire Assembly | 1 |
| 16 | 842406 | Cable | 1 |

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